

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2018-82-S

IN RE:)
)
 Application of Palmetto Wastewater)
 Reclamation LLC for adjustment of rates)
 and charges for, and modification to certain)
 terms and conditions related to the)
 provision of)
 sewer service.)
 _____)

PREFILED DIRECT TESTIMONY OF BRYAN D. STONE
ON BEHALF OF PALMETTO WASTEWATER RECLAMATION LLC

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, PRESENT POSITION AND RESPONSIBILITIES.

A. My name is Bryan D. Stone. My business address is Palmetto Wastewater Reclamation, LLC, 1710 Woodcreek Farms Road, Elgin, SC 29045. I am Chief Operating Officer of Ni Pacolet Milliken Utilities, LLC (“Ni”), and its direct and indirect subsidiaries, including PWR. In this role I have responsibility for PWR’s operations, maintenance, engineering and economic development activities.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I have earned both a Bachelor of Science in Electrical Engineering degree and a Master of Science in Electrical Engineering degree from the Georgia Institute of Technology, as well as a Master of Business Administration degree from the University of Florida. I am a registered Professional Engineer in the state of Florida. A history of my employment prior to becoming employed with Ni and its sister subsidiary, Lockhart Power Company (“Lockhart”), is attached to my testimony as Appendix A.

1 I joined Lockhart in April 2006 with overall responsibility for all aspects of
2 Lockhart's performance. Lockhart's parent company is Pacolet Milliken, LLC ("Pacolet"),
3 which is also the parent company of Ni. I was named Chief Operating Officer of Ni in late
4 2015. In this role, I have been involved in several major capital projects for another indirect
5 Ni subsidiary, Palmetto Utilities, Inc. ("PUI"), which reflected system investments totaling
6 over \$70 million. These projects included the installation of a new large collection system
7 and effluent pipelines and a wastewater treatment plant ("WWTP") expansion. I also have
8 been involved in a number of reliability, efficiency, and sustaining projects for PWR and
9 have been involved in improving operations and implementing cost-effective predictive
10 and preventative maintenance measures, with the goals of reducing spills, improving
11 reliability of service, and reducing overall long-term operational costs.
12

13 **Q. HAVE YOU PREVIOUSLY APPEARED BEFORE THE PUBLIC SERVICE**
14 **COMMISSION OF SOUTH CAROLINA ("COMMISSION")?**

15 A. Yes. I testified before this Commission in Lockhart's last three rate cases in Docket
16 Numbers 2007-33-E, 2010-181-E, and 2013-378-E. I also was recently a witness in the PUI
17 rate case in Docket Number 2017-228-S.
18

19 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

20 A. The purpose of my testimony is to provide a brief overview of PWR operations.
21 With this overview as a backdrop, I will describe the primary reasons why PWR's recent
22 capital investments were necessary, timely, and prudently implemented.
23

24 **Q. WHAT IS PWR'S AUTHORIZED SERVICE TERRITORY?**

25 A. The PWR system is comprised of the Alpine and Woodlands utilities and its
26 authorized service territory is located primarily in the western quadrant of the I-26 and I-
27 20 interchange in northwest Columbia, South Carolina.
28

1 **Q. WHAT PERMITS DOES PWR HOLD FROM THE SOUTH CAROLINA DEPARTMENT**
2 **OF HEALTH AND ENVIRONMENTAL CONTROL (“DHEC”)?**

3 A. PWR holds all necessary DHEC permits to own and operate the Alpine Utilities
4 Stoops Creek WWTP and the Woodlands Hills West Subdivision treatment lagoon and the
5 other facilities and equipment in its system. This includes National Pollutant Discharge
6 Elimination System (“NPDES”) permits for the discharge of the related effluent into the
7 Saluda River. Both NPDES permits were renewed on July 1, 2018.
8

9 **Q. IS PWR PROVIDING WASTEWATER TREATMENT SERVICE TO ITS CUSTOMERS**
10 **IN CONFORMITY WITH ITS PERMITS FROM DHEC?**

11 A. Yes.
12

13 **Q. PLEASE PROVIDE AN OVERVIEW OF PWR’S SYSTEM.**

14 A. The system currently consists of approximately 7,000 equivalent residential
15 customers (“ERCs”) in Alpine and 700 ERCs in Woodlands. The wastewater facilities
16 include over 250,000 feet of piping, more than 700 manholes, and the Stoops Creek WWTP
17 and the Woodlands Hills West Subdivision treatment lagoon.
18

19 **Q. PLEASE DESCRIBE THE MEMO OF UNDERSTANDING WITH DHEC.**

20 A. As the Commission is aware from prior proceedings, the PWR corporate entity
21 initially was created by Ni’s predecessor company, Ni America Capital Management
22 (“NACM”) to acquire the Alpine and Woodlands wastewater utilities in 2011. Before PWR
23 purchased the Alpine and Woodlands systems, the systems were experiencing operational
24 issues in both the Stoops Creek WWTP and the collection systems, and had been fined by
25 state and federal environmental agencies for permit violations. Therefore, in order to
26 acquire the systems, NACM (through PWR) entered into a Memo of Understanding
27 (“MOU”) in 2011 with DHEC that laid out a number of initiatives PWR would pursue in
28 order to improve the performance and reliability of the treatment plants and collection

1 system. In return, DHEC committed not to hold PWR liable for the pre-existing conditions,
2 so long as PWR was pursuing the MOU initiatives.
3

4 **Q. WHAT INITIATIVES WERE REQUIRED BY THE MOU?**

5 A. The MOU identified a number of specific initiatives that PWR would perform,
6 including:

- 7 • Clean, video inspect, and repair as needed all lines in the Alpine collection system,
8 over a five-year period;
 - 9 • Repair all manholes in both the Alpine and Woodlands systems over a three-year
10 period;
 - 11 • Clean and clear the Woodlands treatment lagoon berms; and
 - 12 • Perform major upgrades at the Stoops Creek WWTP within 18 months, including:
 - 13 ○ Add a second, redundant clarifier;
 - 14 ○ Replace the existing bar screen;
 - 15 ○ Add a floating aeration system to allow the plant to operate during a major rain
16 event; and
 - 17 ○ Extend plant walls to increase emergency inflow capacity.
- 18

19 **Q. WOULD YOU PLEASE SUMMARIZE THE MAJOR PROJECTS IN WHICH PWR HAS**
20 **INVESTED AND THE AMOUNT OF CAPITAL EXPENDED ON THEM SINCE**
21 **ENTERING INTO THE MOU WITH DHEC?**

22 A. Yes. Most of the improvement and repair projects pursued since the original
23 acquisition in 2011, which required a total capital investment of approximately \$13 Million,
24 have been either directly or indirectly associated with the DHEC MOU. All of the MOU
25 initiatives related to the Stoops Creek WWTP and Woodlands lagoon, as well as the
26 collection system and manhole inspections repairs, have been completed. In addition, the
27 inspections performed by PWR as required by the MOU revealed that several repairs
28 needed to be made to the collection system manholes. As a result, PWR made the following
29 repairs:

- Approximately 860 spot or point pipeline repairs;
- More than 200 hammer tap repairs; and
- Approximately 300 manhole renovations.

Q. WHAT IS THE CURRENT STATUS OF THE MOU WITH DHEC?

A. The MOU was closed by DHEC effective January 31, 2018, confirming that PWR had completed all of its associated requirements.

Q. OTHER THAN PROJECTS SPECIFIED IN THE DHEC MOU, HAVE ADDITIONAL SIGNIFICANT CAPITAL PROJECTS BEEN PERFORMED IN THE PWR SYSTEM?

A. Yes. As the above MOU initiatives were performed, the need for additional work in the collection system, the Stoops Creek WWTP, and the Woodlands lagoon became apparent. For example, the pipeline video inspections identified the need for a number of pipeline repairs (both short-term and longer-term). Also, in areas where pipelines appeared to be intact but system inflow and infiltration (“I & I”) seemed excessive, PWR performed smoke testing in order to identify other avenues by which water could enter and overload the collection system. These issues, as well as other issues identified during the course of normal operations, have been addressed as listed below.

- Stoops Creek WWTP:
 - Constructed belt press filter building;
 - Relocated belt press to inside building;
 - Installed aerobic digesters;
 - Installed bulk diesel storage; and
 - Upgraded chlorine system.
- Woodlands Lagoon:
 - Installed gravel road on top of lagoon perimeter berm;
 - Widened access area to rear of facility;
 - Converted incoming power supply to an underground feed;
 - Replaced approximately 1/3 of perimeter fencing;

- Installed cellular monitoring and alarm system; and
- Updated disinfection system.

The majority of the costs associated with the projects mentioned above were included in the last base rate filing, Docket No. 2014-69-S, which was approved in 2014. In March 2015, Pacolet purchased the parent company of PWR. Since then, in addition to completing the MOU work and refurbishment of the remaining portion of the collection system, PWR has performed other notable capital projects. These include:

- Replacing an approximately 1,500-foot section of a key pipeline on Rolling Pines Road in the Woodlands neighborhood that had deteriorated to the point it was no longer economical to repair (~\$400,000);
- Installing a splitter box at the Stoops Creek WWTP to allow flow to automatically be divided evenly between the two clarifiers to facilitate better plant process control (~\$475,000, which includes ~\$5.5 million of AFUDC); and
- Adding two aerators to the Stoops Creek WWTP aeration basin in 2018 to increase the total aeration capability of the plant, in order to better control permitted dissolved oxygen levels (~\$60,000).

Q. WAS PWR IMPACTED BY THE HISTORIC FLOOD OF OCTOBER 2015?

A. Yes. The Stoops Creek WWTP in particular suffered significant impacts, due to its proximity (~1/3 mile) to, and low elevation in relation to, the Saluda River. The Woodlands lagoon also suffered damage, as it is immediately adjacent (~250 feet) to the Saluda River. Our understanding is that there was more than 20" of rain in the Columbia area over a several day period, and that led to Lake Murray drain gates being opened on an emergency basis which released additional water into the Saluda River a few miles upstream of the Stoops Creek WWTP and the Woodlands lagoon. As a result, much of both plants were temporarily submerged.

Q. HOW DID PWR RESPOND TO THIS FLOOD?

A. PWR management and contractors were as prepared as possible for the projected heavy rains, and they immediately responded as soon as it was safe to do so. The Stoops

1 Creek WWTP was restored to service within 2-3 days, which was very impressive
2 considering the widespread damage to a variety of electrical and mechanical equipment,
3 buildings, and civil structures. Although the plant was quickly returned to service using a
4 variety of temporary measures, permanent repairs took several months to complete. Several
5 improvements to plant systems and equipment were made, including replacing the damaged
6 backup diesel generator with a larger unit capable of handling the entire plant load, and
7 reconfiguring plant electrical systems to be capable of operating on backup power. While
8 PWR's flood insurance covered a large portion of the flood repair costs, PWR invested
9 additional capital to make plant systems and equipment more robust with the goal of
10 reducing the risk from future natural disasters or other unplanned emergencies.
11

12 **Q. WHAT ARE THE CUSTOMER BENEFITS OF THESE PROJECTS?**

13 A. There are many comprehensive customer benefits that result from PWR's sustained
14 capital investment as described above. For example, the collection system is less impacted
15 by heavy rains and other sources of I & I, which will reduce the occurrences of sanitary
16 sewer overflows ("SSO's"), improve regulatory compliance, and reduce pumping and
17 treatment costs. The design and construction of Stoops Creek WWTP and Woodlands
18 lagoon have also been upgraded, resulting in more reliable operations, better process
19 control, reduced operating and regulatory compliance risk, and more efficient operations.
20

21 **Q. HOW DO THESE CAPITAL PROJECTS POSITION PWR FOR THE FUTURE?**

22 A. These projects place PWR in a reliable, steady, and stable position where it does
23 not expect the need for additional major investments in treatment plants for the foreseeable
24 future. Collection system investments are similarly expected to have reached a plateau,
25 with occasional pipeline section and pump station replacements to be performed as needed.
26

27 **Q. HOW WOULD YOU SUMMARIZE THE OPERATIONAL CONDITION OF PWR NOW**
28 **COMPARED TO IN 2011?**

29 A. The PWR system has been transformed from a "problem child" to a "poster child".

1 I believe this turnaround story represents the best of what a reasonable regulatory agency
2 and a willing and capable private utility can accomplish with a sustained effort. I also
3 believe it is a model for what can, and should, be accomplished in a large number of similar
4 systems statewide.
5

6 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

7 **A** Yes, it does.

APPENDIX A TO DIRECT TESTIMONY OF BRYAN D. STONE

- I began my professional career in 1990 as a Project Engineer at a 500+ employee chemical fertilizer company near Tampa, Florida. My responsibilities involved implementing electrical and instrumentation (“E&I”) projects, with an emphasis on power and controls projects.
- In 1996, I accepted a similar position at a larger company in rural northern Florida. While my responsibilities were similar in nature, the scope was greater, since the new employer had 1,200+ employees locally in two chemical complexes and a mining operation.
- In 2000, I was promoted to E&I Maintenance Superintendent, with responsibilities for the E&I Maintenance Department, including 70 E&I technicians and salaried employees. I had the additional responsibilities of Power Manager, which ultimately included managing over \$50 million annually in combined power purchases and sales. In this capacity, I worked with representatives of various classes of customers, utilities, and legislators on a variety of power-related issues.